

MULTI-COMPARTMENT SEPARATION IN MAGNETIC RESONANCE USING TRANSIENT STEADY-STATE FREE PRECESSION IMAGING

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ABSTRACT OF THE DISCLOSURE

Disclosed is a method of quantitatively separating tissue signals based on relaxation time differences. The method uses the transient signal decay in steady-state free precession (balanced SSFP) imaging to provide an alternative to standard CPMG methods of T_2 -
10 relaxometry. The balanced SSFP technique allows 3-4 times the temporal resolution of CPMG, and also slows the short T_2 decay so that it can be more accurately measured.